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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/802,963	03/12/2001	Paul Anthony John Nolan		6961

7590 03/25/2005

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ART UNIT	PAPER NUMBER
2672	

DATE MAILED: 03/25/2005

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 20050314

Application Number: 09/802,963
Filing Date: March 12, 2001
Appellant(s): NOLAN, PAUL ANTHONY JOHN

James C. Wray
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 12/06/2004.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

The rejection of claims 1-8 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

5,412,767	Long	05-1995

6,317,142 Decoste 11-2201

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

This rejection is set forth in the Final Office Action, dated 06/07/2004, and the Advisory Action, dated 11/17/2004.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 2 is rejected under 35 U.S.C. 102(e) as being anticipated by Decoste et al. U.S. Pat. No. 6,317,142 (Decoste).

3. Claim 2:

Decoste teaches a method of creating effects in a graphical image, comprising choosing a media image (column 4, lines 55-67 and column 6, lines 1-9), causing edges of the media image to have less transparency (a soft brush edge having an adjustable gradient that gives the edge a soft or fuzzy appearance; figure 14, column 14, lines 63-67 and column 15, lines 1-24), adding the media image to a paint layer (column 15, lines 25-67 and column 16, lines 1-41), and

brightening ("Brighten" in figure 18) parts of the paint layer with the media image (figure 18, column 15, lines 25-67 and column 16, lines 1-41).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 3-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Long U.S. Pat. No. 5,412,767 (Long).

6. Claim 3:

Long teaches a method of creating effects in a processed graphic image, comprising providing an image channel with a graphic image having source pixels (column 4-6), providing an alpha channel having alpha channel pixels which are spatially equivalent to the source pixels (column 4-6), assigning a color value assigned to alpha channel pixels (e.g., brush profile values or stencil store 41 or the brush stamps; the source pixels and brush profile values), brightening (multiplying the profile values with stencil signals or changing the colors associated with the brush stamps and therefore brightening or darkening the color value) the color value assigned to alpha channel pixels (column 4-6), and causing edges of an image formed by the alpha channel pixels to have less transparency (e.g., a soft brush edge having an *adjustable gradient* that gives

the edge a soft or fuzzy appearance wherein a profile controls the gradient of the brush and opacity control determines the level of brush transparency; column 4-6).

Examiner Note:

- Long teaches brightening because Long teaches the tuning of the brightness by increasing or decreasing the intensity of the three color components of the individual pixels, wherein the degree of brightening or darkening is prescribed by the control parameters such as brush profile values.
- Long teaches soft brush edge having an *adjustable gradient* that meets the claim limitation of "edges to have less transparency" because a soft brush edge having an adjustable gradient gives the edge a soft or fuzzy appearance wherein a profile controls the gradient of the brush and opacity control determines the level of brush transparency.

7. Claim 4:

Long teaches a method of creating effects in a graphic image, comprising providing a source image channel having source pixels (column 4-6), providing a color level with selected colors (figure 12A and column 15, lines 24-31), providing an alpha channel having alpha channel pixels (e.g., alpha channel pixel profile data that defines which pixels, paint strokes affect the image; alpha channel pixels correspond to the brush stamp pixels that are modifiable by the profile data) which are spatially equivalent to the source pixels (column 4-6), mapping multiple pixels in the alpha channel (there are one-to-one correspondence in the pixels; column 4-5), embossing the pixels in the alpha channel (e.g., modified alpha channel pixel values; column 5, lines 35-51) and using a result of the embossing for changing brightness of the selected colors being applied (column 4-5), and providing highlights to the selected colors (brush effect), thereby providing a sense of depth (multiple layers of brush strokes) due to the embossing, giving the highlights to the applied colors (column 4-6).

Examiner Note:

- Long teaches changing the color value which meets the claim limitation of "embossing" because Long teaches tuning of the brightness by increasing or decreasing the intensity of the three color components of the individual pixels, wherein the degree of brightening or darkening (embossing) is prescribed by the control parameters such as brush profile values.
- Long teaches multiple layers of brush strokes which meets the claim limitation of "providing a sense of depth due to the embossing" because painting on the existing image with multiple brush strokes such as the action of smearing creates the layering effect that in turn creates a sense of depth and changing the color values by changing the stroke effects and the pixel profile data clearly meets the claim limitation of "changing brightness of the selected colors being applied."

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1, and 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Long U.S. Pat. No. 5,412,767 (Long).

10. Claim 1:

(1) Long teaches an apparatus for creating an emblazoning effect in a graphical image, comprising:

(a) A processor (e.g., the brush processor; column 5-6);

(b) A primary buffer for storing primary pixel values representing a region (e.g., primary store 19; column 5-6);

(c) A secondary buffer for storing secondary pixel values representing a region (e.g., second store 20; column 5-6);

(d) A user-modifiable alpha channel for storing tertiary values for pixels representing the same region (e.g., column 4, lines 58-67; column 5, lines 1-7; column 6, lines 35-45);

(e) A function (e.g., the shift brush function or smear brush function) representing application of both color and brightness values to input pixel values (e.g., column 4, lines 58-67; column 5, lines 1-7; column 6, lines 35-45), wherein said processor executes said function on the secondary pixel values (a source patch or a destination patch) to an extent represented by the tertiary pixel values (pixel profile data) held in the alpha channel (e.g., column 4, lines 58-67; column 5, lines 1-7; column 6, lines 35-45), for storing the resultant pixel values as the primary pixel values (e.g., modifying a patch in the primary store 19; column 5; or the modified pixel data is written to the destination patch 47; column 6), in the primary buffer (e.g., column 4-6);

(2) However, Long is silent on the claim limitation of "(f) User-activated means for copying the primary pixel values stored in the primary buffer to the secondary pixel values stored in the secondary buffer."

(3) Long teaches means are provided for copying image data from a first patch to a second patch of the image (column 4). It is conceivable that the source patch and destination patch are interchangeable and therefore Long suggests means for copying the primary pixel values in the primary buffer to the pixel values in the second buffer by copying the resulting

pixel values in the destination buffer to the source buffer when exchanging the role of the source patch and destination patch.

(4) It would have been obvious to one of ordinary skill in the art to have incorporated the means for copying the pixel data in the primary buffer back to the second buffer to replace the source region with the modified pixels wherein replicating is involved so as to reproduce the texture of the source region (column 1).

11. Claim 5:

The claim 5 encompasses the same scope of invention as that of the claim 1. The claim 5 is subject to the same rationale of rejection set forth in the claim 1.

Claim 6:

The claim 6 encompasses the same scope of invention as that of claim 5 except additional claimed limitation of choosing a media image, causing edges of the media image to have less transparency, adding the media image to a paint layer, and brightening parts of the paint layer with the media image. However, Long further discloses the claimed limitation of choosing a media image (column 4-6), causing edges of the media image to have less transparency (soft-edged brushes implying the gradient appearance in transparency; column 4-6), adding the media image to a paint layer (adding the source patch to the destination patch), and brightening (brightening or darkening depends on the selected brush profile and color, the process of brightening parts of the paint layer in inherent in Long; see column 4) parts of the paint layer

with the media image (e.g., the operating artist selects a brush color, a brush size and a type of brush; column 4).

Claim 7:

The claim 7 encompasses the same scope of invention as that of claim 5 except additional claimed limitation of providing an image channel with a graphic image having source pixels, providing in the alpha channel alpha channel pixels which are spatially equivalent to the source pixels, assigning color values to the alpha channel pixels, and causing edges of an image formed by the alpha channel pixels to have less transparency. However, Long further discloses the claimed limitation of providing an image channel with a graphic image having source pixels (e.g., column 2, lines 33-55), providing in the alpha channel alpha channel pixels which are spatially equivalent to the source pixels (e.g., column 4, lines 40-43; column 5, lines 14-17), assigning color values to the alpha channel pixels (column 4, lines 58-67; column 5, lines 1-8), and causing edges of an image formed by the alpha channel pixels to have less transparency (e.g., soft edge brushes having a gradient effect in the level of transparency in the edges; column 4-6).

Claim 8:

The claim 8 encompasses the same scope of invention as that of claim 5 except additional claimed limitation of providing source image channel having source pixels, providing a color level with selected colors, and providing in the alpha channel alpha pixels which are spatially equivalent to the source pixels. However, Long further discloses the claimed limitation of providing source image channel having source pixels (column 5), providing a color level with

selected colors (column 4), and providing in the alpha channel alpha pixels which are spatially equivalent to the source pixels (e.g., column 4, lines 58-67; column 5, lines 1-8).

(11) Response to Argument

On Page 19-21 in the remarks, the Appellant argued with respect to the claim 1 and similar claims in substance:

(A) "The limitations of Claim 1 are not obvious under Long. Long, as the Examiner notes, is silent on the limitation of "(f) User-activated means for copying the primary pixel values stored in the primary buffer to the secondary pixel values stored in the secondary buffer." While Long may teach providing a means for copying pixel values from the primary buffer to the secondary buffer, Long does not teach a user-activated means for doing such. Nor would such a modification have been obvious. Long's method automatically updates the secondary buffer, but the Applicant's invention allows a user-activated update of such, permitting the user to determine when the secondary buffer is to be updated with changed pixels, thus facilitating a greater degree of control with UNDO-like functions, since the buffers are not both constantly automatically updated."

In reponse to the arugmnets in (A), Appellant argues in essence with respect to the claim 1 that Long does not teach a user-activated means for copying pixels values from the primary buffer to the second buffer. However, Long teaches in column 4 that an ARTIST creates a destination image patch by combining the source image patch with the destination image patch using the profile data.

For example, Moreover, Long teaches in column 6, the source and destination patches 46, 47 defining pixel data in these patches and storing the modified pixel data in the destination patch 47. Long teaches storing the resultant pixel values in the primary store 19 as the primary pixel values for display. In column 5 of Long, it is stated, "The two full resolution stores 19 and 20 may be used for the shift brush operation by supplying a copy of the same data to both stores, parallel reading of the source and destination patches is then simplified by reading the source patch from the secondary store 20 while modifying a patch in the primary store 19." Long teaches supplying a copy of the same data to both stores, i.e., a copying the same data to both the primary store 19 and the secondary store 20.

Long further teaches that the ARTIST then selects the created destination image patch as a source image patch for further blending with another destination image. The act of selecting the just created destination image patch (currently stored in the primary store 19) as a source image patch puts/copies the previously created destination image patch to the secondary buffer (the second store 20) because the created destination image patch in the preceding step is NOW used as a source image patch which should be stored in the secondary buffer or the secondary store 20 while further operation by the artist using the touch tablet continues copying the same pixels (as stored in the primary buffer or the store 19) to the secondary buffer or the store 20 as a source image. This results in an indirect copying by the user for copying the primary pixel values (as stored in the primary buffer) as the source image to the secondary pixel values (as stored in the second buffer) because the source image is stored in the second buffer and the destination image is stored in the primary buffer. Therefore, Long at least teaches an indirect user-activated means (artist's touch tablet) and thus suggests a direct user-activated means for copying the destination

pixel values from the primary buffer storing the pixels values in the store 19 or the viewing store 18 to the secondary buffer (the store 20).

In addition, Long teaches that a part of any image in the secondary store 20 may be cut out and placed into the primary store 19, using a stencil signal to control the blending of the two images. Long teaches the coefficient k used in the blending of the two images is determined by multiplying together the brush shape profile 36, stylus pressure from the stylus/touch tablet combination 15 and control image data held in stencil store 41. Accordingly, the brush shape profile 36, stylus pressure from the stylus/touch tablet combination 15 and stencil store 41 storing the tertiary values constitutes an alpha channel.

Moreover, Long teaches in column 6, the source and destination patches 46, 47 defining pixel data in these patches and storing the modified pixel data in the destination patch 47. Long applies the smear function using the alpha values to generate the destination pixels in the destination patch. Long therefore teaches executing the smear function on the secondary pixel values (pixel values stored in the source buffer) to the extent of the tertiary values (to the extent of the alpha values used in the alpha blending) and storing the resultant pixel values (storing the modified pixel values) as the primary pixel values (as the destination pixel values) in the primary buffer (in the destination buffer). In another example, Long teaches storing the resultant pixel values in the primary store 19 as the primary pixel values for display.

Long also teaches supplying a copy of the pixel values to the secondary store 20. For example, in column 5 of Long, it is stated, "The two full resolution stores 19 and 20 may be used for the shift brush operation by supplying a copy of the same data to both stores, parallel reading

of the source and destination patches is then simplified by reading the source patch from the secondary store 20 while modifying a patch in the primary store 19." Long teaches supplying a copy of the same data to both stores, i.e., a copying the same data to both the primary store 19 and the secondary store 20. Long therefore teaches or suggests supplying a copy of the pixel values in the primary store 19 to the secondary store 20.

On Page 12-14 in the remarks, the Appellant argued with respect to the claim 2 and similar claims in substance:

(B) "Unlike Decoste, which teaches reducing the transparency of the edges of a brush stroke, the Applicant's invention teaches reducing the transparency of the edges of the selected media image."

In reponse to the arugmnets in (B), a brush stroke as painted constitutes an image or the so-called brush image (column 19 of Decoste) and the selected brush stroke of the image constitutes the selected image. The term "media image" set forth in the claim 2 merely means an image being painted by the artist so that the image can be published. The painting with a brush stroke or a plurity of brush storkes forms a media image that can be published for the public to view.

Decoste teaches selecting a brush stroke with the "select" function Fig. 11 and applying a soft edge to the brush stroke in Fig. 14 with a variety of paint style such as the user's selection of the softness profile and user's specification of the opacity level which can be reduced along the

edge of the brush stroke in relation to the softness profile. Therefore, Decoste teaches reducing the transparency of the edges of the selected media image.

On Page 12-14 in the remarks, the Appellant argued with respect to the claim 2 and similar claims in substance:

(C) "Replicating this effect using the methods described in Decoste would be a tedious process of applying increasingly transparent brush strokes radiating outward, requiring constant adjustment of the brush transparency...Decoste merely teaches the common feature of many paint programs, that of opening an image and painting on it with a brush, producing a wholly different effect than that of the Applicant's new method. This is obvious from viewing Fig. 14 of Decoste, which provides for the altering of brush characteristics, not selected image characteristics."

In reponse to the arugmnets in (C), Appellant argues that the selected painted brush stroke is not a selected image. However, the selected brush painted on a empty space of a window is a selected image. The selected brush is more specific than the selected image.

Appellant argues that the term "selected image" in the present application cannot be properly interpreted as a "selected brush" because the brush of Decoste may be a specifies of the genus known as the "image." However, a generic claim can not be allowed if the prior art describes a species within the claimed genus (See In re Slayter, 276 F.2d 408, 411, 125 USPQ 345, 347(CCPA 1960).

On Page 12-14 in the remarks, the Appellant argued with respect to the claim 2 and similar claims in substance:

(D) "The Applicant's invention simply requires three easy steps: (1) providing a paint layer of the desired type, (2) selecting the image such that the edges of the selected image are less transparent, and (3) combining the two, a method superior to that taught by Decoste."

In reponse to the arugmnets in (D), Decoste teaches a method of creating effects in a graphical image, comprising choosing a media image as shown column 5, lines 55-67 and column 6, lines 1-9, causing edges of the media image to have less transparency wherein a soft brush edge having an adjustable gradient gives the edge a soft or fuzzy appearance as shown in figure 14, column 14, lines 63-67 and column 15, lines 1-24. Decoste further teaches adding the media image to a paint layer as shown in column 15, lines 25-67 and column 16, lines 1-41, and brightening ("Brighten" in figure 18) parts of the paint layer with the media image as shown in figure 18, column 15, lines 25-67 and column 16, lines 1-41.

Appellant argues that the cited prior art does not teach reducing the transparency of the edges of the selected media image. However, Decoste teaches changing properties associated with the brush strokes on the edges of the media image. Decoste teaches selecting a video clip of many media images or selecting a media object such as a brush stroke on the edge of the media image or selecting the brush stroke having the same size as the media image. Decoste teaches applying a soft brush and adjusting brush attributes to a media object by adjusting the object parameters so that the edge has a soft or fuzzy appearance and thereby causing the media object to have less transparency. Thus, Decoste teaches the claim invention as recited in the claim 2.

On Page 14-15 in the remarks, the Appellant argued with respect to the claim 3 and similar claims in substance:

(D) "Claim 3 teaches providing an alpha channel having alpha channel pixels that are spatially equivalent to the source pixels. The Examiner notes that Long teaches the use of a k coefficient for transparency, but this is not the same as an alpha channel with corresponding spatially equivalent pixels."

In reponse to the arugmnets in (D), Appellant argues in essence with respect to the claim 3 that the use of a k coefficient for transparency is not the same as an alpha channel with corresponding spatially equivalent pixels. The profile data contains a plurality of opacity values or alpha values or a plurality of k coefficients for transparency for use in blending between the source patch and the destination patch (See Long column 5, lines 23-30 and column 6, lines 35). The k coefficients are alpha values corresponding to the source pixels and the destination pixels in the image blending or smearing. The profile data provides data for the alpha channel in the blending operation which spatially corresponds to the source patch pixels and destination patch pixels so that the blending of each pixel in the source patch and a spatially corresponding pixel in the destination patch is possible by using the spatially corresponding alpha value in the profile data. Long clearly teaches in Fig. 3 a stencil channel and the profile data as defined by a three-dimensional stencil plane for providing the alpha channel wherein a point in the three-dimensional surface corresponds to a transparency value which spatially corresponds to a pixel in the source patch and a corresponding pixel in the destination patch. The k coefficient values

for transparency are equivalent to the alpha values and Long teaches storing the k coefficient values are collectively called the brush profile data which are placed over a pixel grid in which the profile data in combination with the pixel grid constitutes the alpha channel pixels for the pixel grid. Long teaches the stencil store 41 in combination with the brush profile data provides the alpha values for blending of the source pixels and the destination pixels.

On Page 14-15 in the remarks, the Appellant argued with respect to the claim 3 and similar claims in substance:

(D) "Painting with a soft edged brush produces strokes that may or may not have less transparency at the edges."

In response to the arguments in (D), the Examiner disagrees for the reasons given below. A soft edge brush having an adjustable gradient gives the edge a soft or fuzzy appearance and therefore the edge appears to have less transparency due to the gradient in the transparency along the edge area or the image region wherein the transparency of the image region is clearly varying along the image patch by controlling the three-dimensional stencil plane of the profile data for the dynamic effect of the transparency.

On Page 14-15 in the remarks, the Appellant argued with respect to the claim 3 and similar claims in substance:

(E) "Nowhere does Long teach the alteration of an image defined by the alpha channel, after the image has been defined."

In response to the arguments in (E), the brush after being painted (e.g., in an empty space) constitutes an image that has been defined. The essence of Appellant's argument is whether a "painted brush" on an empty space in window forms/produces an image. It is clearly that a painted brush on an empty space in window creates an image being viewed. While the brush of Decoste may be a specifies of the genus known as the "image." However, a generic claim cannot be allowed if the prior art describes a species within the claimed genus (See In re Slayter, 276 F.2d 408, 411, 125 USPQ 345, 347(CCPA 1960).

On Page 15-16 in the remarks, the Appellant argued with respect to the claim 4 and similar claims in substance:

(F) "The Examiner cites Long (column 5, lines 35-51), and makes the determination that modifying alpha channel pixel values is the equivalent to an embossing effect. It is not. To claim that Long's 'modifying alpha channel pixel values' teaches all effects obtained by alteration of alpha channel values would be applying overbroad interpretation. The Applicant claims a specific effect, embossing, not taught by Long. This effect is obtained by a specific alteration of pixels including applying highlights to the altered pixels to produce the effect of depth....The Examiner also notes that changing the color value meets the claimed limit of embossing and that multipe layers of brush strokes meet the claimed limitation of providing a sense of depth due to the embossing. However, to get multiple layers of brush strokes to replicate the embossing effect, while possible, is tedious and time consuming, and Applicant's embossing effect, a new method, produces the same result in a fraction of the time, a superior and novel method."

In response to the arguments in (F), Appellant argues in essence with respect to the claim 4 regarding the claim limitation of embossing and providing a sense to depth due to the embossing. However, Long teaches tuning of the brightness by increasing or decreasing the intensity of the three color components of the individual pixels of brush strokes laid out in layers, wherein the degree of brightening or darkening of a particular brush stroke is prescribed by the control parameters such as brush profile values, and thereby producing the embossing effect. In addition, Long teaches multiple layers of brush strokes that provides a sense of depth due to the embossing because painting on the existing image with multiple brush strokes with different opacity values as controlled by the application of the smearing function creates the layering effect that in turn creates a sense of depth. The relative transparency of the layers provides a sense of depth due to the the color and transparency difference among the layers and due to the sequence of the controllable smearing operations by an artist.

Finally, Long teaches a sense of depth of the soft brush strokes having soft brush edge with an adjustable gradient because a soft edge of a brush stroke having an adjustable gradient gives the edge of the brush stroke a soft or fuzzy appearance with respect to other brush strokes underlying it or with respect to the inner area of the brush stroke, and thereby providing a sense of depth due to the layering of the brush strokes as well as the soft edge strokes within the layers. Note that the profile data controls the gradient of the brush and opacity control determines the level of brush transparency with respect to each layer.

On Page 21-22 in the remarks, the Appellant argued with respect to the claim 5 and similar claims in substance:

(G) "Claim 5 teaches storing tertiary values for pixels representing the same region (as the primary and secondary buffer) in a user-modifiable alpha channel. Long teaches the use of an alpha coefficient, k, to produce pixels of more or less transparency. While storing of alpha values for pixels is taught in Long, the alpha values are modifiable only as they are applied. Long only teaches pre-application modification of alpha values to be stored, which is to say, the edges of a brush stroke can be modified for transparency prior to application, but Long does not teach post stroke application modification of the alpha channel values. Essentially, the alpha channel is not user-modifiable in and of itself; the values stored therein can only be modified by the application of an additional brush stroke."

In response to the arguments in (G), Appellant argues that Long does not teach post stroke application modification of the alpha channel values. However, Long teaches storing the stencil plane and the profile data in a storage area such as a disk and therefore the data can be overwritten by a user. It is therefore user modifiable. Moreover, the stencil data can be a plurality of stencil surfaces as they are stored in a disk and the program can load one from the plurality of the stencil surfaces in the disk. Appellant's user-modificiable alpha channel is not the same as post modification of the alpha channel or pre-modification of alpha channel. Appellant's analysis as presented in the argument is irrelevant to the claim language in view of the prior art of record. Long meets the claim limitation of the user-modifiable alpha channel. Whether the alpha channel is pre-modified or post-modified is not an issue as the language is not found in the claim 5.

12. Appellant argues in essence with respect to Claim 6 and similar claims that:

(H) "Claim 6 adds the patentable feature of choosing a media image, causing an edge of the media image to have less transparency, and adding the media image to a paint layer and brightening parts of the paint layer with the media image. These features are not taught nor suggested by Long. "

In response to the arguments in (H), Long teaches the brush profile data wherein the alpha values used for the blending of the two image regions vary with the pixel positions from the center of the image region or the image patch, causing an edge of the image region to have less transparency. Long teaches adding the source image patch to the destination image patch, i.e., Long teaches adding the source media image to a paint layer and brightening parts of the paint layer with the source media image using the alpha values calculated from the pixel profile data. The pixel profile data brightens everywhere in the image patch or just a portion of the image patch.

For example, Long teaches the control parameters such as brush profile values to control the blending of the two images. Long also teaches assigning color values to the source and destination image pixels and changing the color values to the destination image pixels, wherein Long teaches changing the color values associated with the destination pixels using the alpha values wherein the alpha values change as a function of the distance from the center of the image region. According to Long, the center of the image region is brightened because the varying alpha values applied to the source and destination image pixels change the transparency

associated with the destination image pixels. The image region or the image patch is brightened by increasing or decreasing the intensity of the three color components of the individual pixels in alpha blending, wherein the degree of **brightening** or darkening is prescribed by the control parameters such as brush profile values. Finally, Long teaches a soft brush edge (column 5, lines 1-10) that has an *adjustable gradient* from the center of the image patch to cause "edges to have less transparency" because a soft brush edge having an adjustable gradient gives the edge a soft or fuzzy appearance wherein a profile controls the gradient of the brush and opacity control determines the level of brush transparency.

13. On Page 23 of the Remarks, Appellant argues in essence with respect to Claim 7 and similar claims that:

> (I) "Claim 7 teaches the wholesale modification of the alpha channel values at any point, not only as brush strokes are being applied. Nowhere does Long teach such a method. Long allows the user to define alpha channel values as strokes are applied, but once the strokes have been applied, the values cannot be altered, but by another stroke. Applicant's invention allows for modification of the alpha channel values whenever the user so desires, permitting the user to decrease transparency around the edges of an image defined by the alpha channel post brush stroke application. "

As to the specifics of Appellant's arguments, the Appellant's arguments cannot be found in the claim 7. Namely, the claim 7 does not set forth "modification of the alpha channel values whenever the user so desires" nor "permitting the user to decrease transparency around the edges

of an image defined by the alpha channel post brush stroke application." Appellant's arguments are thus irrelevant in view of the claim language set forth in the claim 7 and the rejection based on the cited prior art of record.

Long discloses the claimed limitation of providing an image channel with a graphic image having source pixels (e.g., column 2, lines 33-55), providing in the alpha channel alpha channel pixels which are spatially equivalent to the source pixels (e.g., column 4, lines 40-43; column 5, lines 14-17), assigning color values to the alpha channel pixels (column 4, lines 58-67; column 5, lines 1-8), and causing edges of an image formed by the alpha channel pixels to have less transparency (e.g., soft edge brushes having a gradient effect in the level of transparency in the edges; column 4-6).

The Examiner interprets the alpha channel pixels as the modified pixels carrying the alpha information from the alpha channel or the alpha values associated with the destination pixels. From Long, the alpha values are calculated based on the pixel profile data and the pixel color values are modified after using the alpha values thus calculated. Long teaches the alpha blending using some control parameters wherein the control parameters correspond to the alpha values. The control parameters such as brush profile values control the blending of the two images and color values are assigned to the source and destination image pixels. Long therefore teaches changing the color values to the destination image pixels. Long further teaches soft brush edge (column 5, lines 1-10) in the blending of the two images wherein the soft brush edge is controlled by the shape of the brush profile (e.g., Figure 2). Long thus teaches causing edges of an image formed by the alpha channel pixels to have less transparency because a soft brush edge (column 5, lines 1-10) has an *adjustable gradient* and therefore edges have less transparency

because a soft brush edge having an adjustable gradient gives the edge a soft or fuzzy appearance wherein a profile controls the gradient of the brush and opacity control determines the level of brush transparency.

Finally, Long teaches changing the color values of a portion of an image region or an image patch to brighten the image by increasing or decreasing the intensity of the three color components of the individual pixels, wherein the degree of brightening or darkening is prescribed by the control parameters such as brush profile values.

14. On Page 23-24 of the Arguments, Appellant argues in essence with respect to Claim 8 and similar claims that:

> (J) "Claim 8 adds the patentable feature of providing a source image channel having source pixels, providing a color level with selected colors, and providing in the alpha channel alpha channel pixels which are spatially equivalent to the source pixels to claim 5. These features are not taught nor suggested by Long. Claim 8 teaches a user-modifiable method of providing source image channels. Long does not teach such a method. "

In response to the arguments in (J), Long further discloses the claimed limitation of providing source image channel having source pixels (column 5), providing a color level with selected colors (column 4), and providing in the alpha channel alpha pixels which are spatially equivalent to the source pixels (e.g., column 4, lines 58-67; column 5, lines 1-8).

15. On Page 23-24 of the Arguments, Appellant argues in essence with respect to Claim 8 and similar claims that:

(K) "Claim 8 teaches a user-modifiable method of providing source image channels. Long does not teach such a method. "

In response to the arguments in (K), Long teaches storing the stencil plane and the profile data in a storage area such as a disk and therefore the data can be overwritten by a user. It is therefore user modifiable. Moreover, the stencil data can be a plurality of stencil surfaces as they are stored in a disk and the program can load one from the plurality of the stencil surfaces in the disk.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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March 14, 2005

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